

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

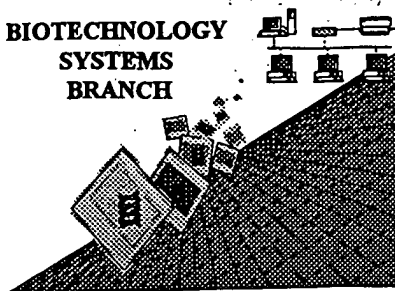
- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ✗ ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## **RAW SEQUENCE LISTING** **ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/449,817

Source: 1652

Date Processed by STIC: 7/17/2000

**RECEIVED**

JUL 28 2000

TECH CENTER 1600/2000

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October-1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/449,817

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 ☐ Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 ☐ Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 ☐ Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 ☐ Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 ☐ Variable Length Sequence(s) \_\_\_\_ contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 ☐ PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 ☐ Skipped Sequences (OLD RULES) Sequence(s) \_\_\_\_ missing. If intentional, please use the following format for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 ☐ Skipped Sequences (NEW RULES) Sequence(s) \_\_\_\_ missing. If intentional, please use the following format for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 10 ☐ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 ☒ Use of <213>Organism (NEW RULES) Sequence(s) 1-4 are missing this mandatory field or its response.
- 12 ☐ Use of <220>Feature (NEW RULES) Sequence(s) \_\_\_\_ are missing the <220>Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 ☐ PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.

RECEIVED

JUL 28 2000

TECH CENTER 1600/2900

1652

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/449,817 DATE: 07/17/2000  
 TIME: 11:26:30

Input Set : A:\Seqidt-1.txt  
 Output Set: N:\CRF3\07172000\I449817.raw

Does Not Comply  
 Corrected Diskette Needed

3 <110> APPLICANT: STEINER, MITCHELL; RINALDY, AUGUSTINE; AND MENON, REMA  
 5 <120> TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID ENCODING P-HYDE  
 6 PROTEIN AND METHODS OF INDUCING SUSCEPTIBILITY  
 7 TO INDUCTION OF CELL DEATH IN CANCER  
 9 <130> FILE REFERENCE: P-2762-US1  
 11 <140> CURRENT APPLICATION NUMBER: 09/449,817  
 12 <141> CURRENT FILING DATE: 1999-11-26  
 14 <160> NUMBER OF SEQ ID NOS: 4  
 16 <170> SOFTWARE: PatentIn Ver. 2.1  
 18 <210> SEQ ID NO: 1  
 19 <211> LENGTH: 733

W--> 20 <212> TYPE: DNA  
 22 <213> ORGANISM:

*mandatory numeric identifier and response needed,*

22 <400> SEQUENCE: 1  
 23 tacgacttgg tcaacctggc agtcaagcag gtcttggcca acaagagcca cctctgggtg 60  
 24 gaggaggagg tctggcggat ggagatctac ctctccctgg gagtgtctgg cctcggcacg 120  
 25 ttgtccctgc tggccgtgac ctcaactgcc tccattgcaa actcgtctca ctggaggagg 180  
 26 ttcaagcttc ttcaagcttc actgggcttt gtggccctcg tgetgagcac actgcacacg 240  
 27 ctcaacctac gctggaccgg cgcccttcgaa gagaccgcta caagttctac ctgcctccca 300  
 28 ccttcacgct cagcgtgctg gtgccctgcg tgcctatcct ggccaaagcc ctgtttctcc 360  
 29 tgccttgcac cagccgcaga ctccccagga tccggagaag ctgggagagg gagagcacc 420  
 30 tcaagttcac gctgcccaca gaccacgccc tggccgagaa gacgagccac gtatgagg 480  
 31 cctgccctgg gctctggacc ccgggcacac gagggacggt gccctgagcc cgttagggtt 540  
 32 tottttcttg gtggtgcaaa gtggtataac tgtgtgcaaa taggagggtt gaggtccaaa 600  
 33 ttctctggga tcaaatgtat gcatgactat tcagaatgat atacacacat atgtgtatat 660  
 34 gtattttacat atattccaca tatataacag gatttgaat tatacatagc tagctaaaaa 720  
 35 aaaaaaaaaa aaa 733

*see circled  
 portion of  
 Item 12 on  
 Enn summary  
 sheet.*

W--> 40 <212> TYPE: DNA  
 42 <213> ORGANISM:

*same enn*

42 <400> SEQUENCE: 2  
 43 atgtccgggg agatggacaa accgctcatc agtgcgccgt tgggtggacag tgatggcagt 60  
 44 ctggctgagg tccccaagga ggctcccaaa gtgggcatcc tgggcagcgg ggattttgcc 120  
 45 cgggtccctg ccacacgctt ggtgggctct ggcttctttg tgggtgggtgg aagccgtaac 180  
 46 cccaaacgca ctgcccgcct ctccccctcc tttagcccaag tgactttcca ggaggaggcc 240  
 47 gtgagctctc cagaggatcat ctttgtggcc gtgttccggg agcactactc ctcaactgtg 300  
 48 agtcttctg accagttggc tggcaagatc ctagtggatg taagcaaccc cagggagaag 360  
 49 gagegtcttc agcaccgcca gtccgaacgc gactacctgg cctccctctt cctgacctgc 420  
 50 actgtggtca aggccttcaa cgtcatctct gcatgggccc tacaggcttg cccaagggat 480  
 51 ggggaacagg aggtgctcat ctgcggtgac cagctggaag ccaagcacac cgtctcagag 540  
 52 atggcgcgcg ccatgggttt caccacctg gacatgggat ccctggcctc agcgaggagg 600  
 53 gtagaggcca taccctgcg cctccttcca tctgggaagg tgcccacct cctggccctg 660  
 54 gggctaagca cacaagcta tgctacaac ttcatccggg acgttctaca gccgtacatc 720  
 55 cggaaagatg agaacaagtt ctacaagatg cccctgtctg tgggtcaaac cagcataccc 780  
 56 tgtgtggtt acgtgctgct gtccctggtt tacctgctg gtgtgctggc agctgccctt 840  
 57 cagctgagga gggggaccaa gtaccagcgc ttccagact ggctggacca ttggctgcag 900

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/449,817

DATE: 07/17/2000  
TIME: 11:26:30

Input Set : A:\Seqidt-1.txt  
Output Set : N:\CRF3\07172000\I449817.raw

```

58 caccgcaagc agatcgggct actcagcttt ttttcgcca tgcgcacgc tctctacagc 960
59 ttctgctgc cgtgcgccc cteccaccgc tatgatctgg tcaacctggc tgtgaagcag 1020
60 gtcctggcca acaagagccg cctctgggtt gaggaagaag tctggcggtt ggagatatac 1080
61 ctgtccctgg gtgtgctggc tctgggcatg ctgtcactgc tggcggttac ctgatccct 1140
62 tcattgcaa actcactcaa ctggaaggag ttcagctttg tgcagtcac gctgggcttc 1200
63 gtggccctga tgcctgagcac aatgcacacc ctcacctacg gctggaccgc tgcctttgag 1260
64 gaaaaccact acaagtctta cctgccacc acattcacgc tcacgctgct cctgccctgt 1320
65 gtcatcatcc tggccaaggc cctcttctc ctgccctgcc tcagccacag actcaccag 1380
66 atcgcgagg gctgggagag ggatgggtgc gtcaagttca tgcgcgccgc tggccacaca 1440
67 cagggggaga aaacaagcca cgtgtga 1467

```

71 <210> SEQ ID NO: 3

72 <211> LENGTH: 3884

73 <212> TYPE: DNA

W--> 74 <213> ORGANISM:

75 <400> SEQUENCE: 3

*same*

```

76 gcggccgcca tcatcaataa tataccttat tttggattga agccaatatg ataatgagg 60
77 ggtggagttt gtgacgtggc gcggggcgctg ggaacggggc gggtgacgta gtagtgggc 120
78 ggaagtgtga tgttgcaagt gtggcggaac acatgtaagc gacggatgtg gcaaaagtga 180
79 cgtttttggt gtgcgcgggt gtacacagga agtgacaatt ttcgcgcggt tttaggcgga 240
80 tgtgtagta aatttgggcg taaccgagta agatttgccc attttcgcg gaaaactgaa 300
81 taagaggag tgaaatctga ataattttgt gttactcata gcgcgtaata tttgtctagg 360
82 gccgcgggga ctttgaccgt ttacgtggag actcgccacc ggcgcgcccc gatgtacggg 420
83 ccagatatac gcgtatctga ggggactagg gtgtgtttag gcgaaaagcg gggcttcggt 480
84 tgtacgcggt taggagtcct ctcaggatat agtagtttcg cttttgcata gggaggggga 540
85 aatgtagtct tatgcaatac tctttagtgc ttgcaacatg gtaacgatga gttagcaaca 600
86 tgccttaaca ggagagaaaa agcaccgtgc atgccgattg gtggaagtaa ggtggtacga 660
87 tcgtgcctta ttagggaaggc aacagacggg tctgacatgg attggacgaa ccactgaatt 720
88 ccgcattgca gagatattgt atttaagtgc ctgactcgat acaataaacg ccatttgacc 780
89 attcaccaca ttggtgtgca cctccggccc tggccactct cttccgcac gctgtctgcg 840
90 ggggccagct gttgggctcg cggttgagga caaactcttc gcggtcttcc cagtactctt 900
91 ggatcgaaa cccgtcgcc tccgaacggg actccgcgcg cgagggacct gagcgagtcc 960
92 gcatcgaccg gatcggaaaa cctctcgaga aaggcggtga accagtcaca gtcgctctag 1020
93 aactagtga tccccgggc tgcaggaaat cgataattcg gcacgaggct gccgaggcac 1080
94 tgtgatgtcc ggggagatgg acaaacggct catcagtcgc cgttgggtgg acagtgtagg 1140
95 cagtctggtc gaggtcccca aggaggctcc caaagtgggc atcctgggca gcggggattt 1200
96 tgcggggtcc ctggccacac gcctgggtgg cctctggttc tttgtgtggt tgggaagccg 1260
97 taaccccaaa cgcactgccc gcctcttccc ctccttagcc caagtgaact tcaggaggga 1320
98 ggccgtgagc tctccagagg tcatctttgt ggccgtgttc cgggagcact actcctcact 1380
99 gtgcagttct gctgaccagt tggctggcaa gatcctagt gtagtaagca accccacgga 1440
100 gaaggagcgt cttcagcacc gccagtcgaa cgcgcgtagc ctggcctccc tcttccctgc 1500
101 ctgactgtgt gtcaaggcct tcaacgtcat ctctgcatgg gccctacagg ctggcccaag 1560
102 ggtatgggaa aggcagggtc tcatctgcgg tgaccagctg gaagccaaag acaccgtctc 1620
103 agagatggcg cgcgcatatg gtttcacccc actggacatg ggatccctgg cctcagcgag 1680
104 gtaggttagag gccatacccc tgcgcctcct tccatcctgg aaggtgcccc cctcctggc 1740
105 cctggggcta agcacacaaa gctatgccta caacttcac cgggacgttc tacagccgta 1800
106 catccggaaa gatgagaaca agttctacaa gatgccctg tctgtggtca acaccacgat 1860
107 accctgtgtg gcttacgtgc tgcgtgcctt ggtttacctg cctggtgtgc tggcagctgc 1920
108 ccttcagctg aggaggggga ccaagtacca gcgcttccca gactggctgg accattggct 1980
109 gcagcaccgc aagcagatcg ggctactcag ctttttttc gccatgctgc acgctctcta 2040

```

RECEIVED  
JUL 28 2000  
TECH CENTER 1600/2300

## RAW SEQUENCE LISTING

DATE: 07/17/2000

PATENT APPLICATION: US/09/449,817

TIME: 11:26:30

Input Set : A:\Seqidt-1.txt

Output Set: N:\CRF3\07172000\I449817.raw

```

110 cagcttctgc ctgccgtgc gccgtccca ccgctatgat ctggtcaacc tggctgtgaa 2100
111 gcaggctctg gccacaaga gccgcctctg ggttgaggaa gaagtctggc ggatggagat 2160
112 atacctgtcc ctgggtgtgc tggctctggg catgctgtca ctgctggcgg ttacctcgat 2220
113 cccttccatt gcaaaactcac tcaactggaa ggagttcagc tttgtgcagt ccacgctggg 2280
114 cttcgtggcc ctgatgtga gcacaatgca caccctcacc tacggttgga cccgtgcttt 2340
115 tgaggaaaac cactacaagt tctacctgcc acccacattc acgctcacgc tgctcctgcc 2400
116 ctgtgtcatc atcctggcca agggcctctt cctcctgccc tgcctcagcc acagactcac 2460
117 caagatccgc aggggctggg agagggatgg tgcggtcaag ttcattgtgc ccgctggcca 2520
118 cacacagggg gagaaaacaa gccacgtgtg agggcctgga aatggagaca ggcacagctt 2580
119 gtggggggccc tgggctgggt tgggtctctt tttctgggat ggtatatgcy tgggtggccc 2640
120 aggtctgaat ttctgggatg caggtgtatg ccgagatata cagaatggcg taccacacat 2700
121 gcgataagta ctcacatata ttcatatat aataggattt actattatc ttagttaaaa 2760
122 aaaaatagtg ggtccttata tttcaactta tgcagggtcc ctatatattca acttgagcat 2820
123 ttcagagcaa atgccacaca ttaaacagca gatcccaccc ttgtggtagc tgcagagaca 2880
124 gacagaaact tctggttatg agagagactg tattttgttg gattctacct ttaatccccg 2940
125 ttctctacgt tccccgttta gccacatctt aacgttggtg cagagctggg acaagagctg 3000
126 gctctgtgtc agcctccccc atcccagggc taggaaacaa gcctctgatg aacagaggga 3060
127 ccaggtctgg accctcctgc tcccgttccc ctgggctcga gtggggaggc tcagcgggat 3120
128 ccccgcaat ctgtgcagga gttttcacag gtctgtcctt tcttccggga gcggtctgaa 3180
129 gcggcccat ctgacccatg ctgagccgag attgttcccc actccctgaa agtccagagt 3240
130 caccgtggag cctgcaaat gctccttctg cgaaggtgtg aagtcaccgt ctcaccagag 3300
131 ccattaacga acctgatctt cagaagaagc ataattgttt cccctccatt aagttgggtg 3360
132 tgaccctctt taaaccaactg tgcttctctg cctttcccat cactaatttg ggcattctca 3420
133 tggagtggac tcttgcggg gcagttcagg ggggagggaa gcattagaga ttgcggagaa 3480
134 taaccatcga agcctccctt ggatgttccc agcggtgctt tcattaaatt ggtccctaata 3540
135 gagaatgaca ggggacccct gttgcctgta tgcagagAAC cagccttctg agcaccagc 3600
136 aaacacagtg gccccacgcc cttcaggggg gtcccacgct ccccttccca tgcctttgcc 3660
137 tccctccctc ccggttacaa tcaaccataa aagtctgcaa atattgttt ttgaattatc 3720
138 aagcttatcg ataccgtcga aacttgttta ttgcagctta taatggttac aaataaagca 3780
139 atagcatcac aaatttcaca aataaagcat ttttttcaat gcattctagt tgtggtttgt 3840
140 ccaaaactcat caatgtatct tatcatgtct ggatccgacc tcg 3884

```

143 &lt;210&gt; SEQ ID NO: 4

144 &lt;211&gt; LENGTH: 32166

145 &lt;212&gt; TYPE: DNA

W--&gt; 147 &lt;213&gt; ORGANISM:

147 &lt;400&gt; SEQUENCE: 4

*None*

```

148 atctggaagg tgctgaggtg ccatgagacc cgcaccaggc gcagaccctg cyagtgtggc 60
149 ggtaaacata ttaggaacca gcctgtgatg ctggatgtga ccgaggagct gaggcccgat 120
150 cacttggtgc tggcctgcac ccgcgtgag tttggctcta gcgatgaaga tacagattga 180
151 ggtactgaaa tgtgtggcgc tggcttaagg gtgggaaaga atataataagg tgggggtctt 240
152 atgtagtttt gtatctgttt tgcagcagcc gccgcgcgca tgagcaccac ctcgtttgat 300
153 ggaagcattg tgagctcata tttgacaacg cgcattgccc catgggcccg ggtgcgtcag 360
154 aatgtgatgg gctccagcat tgatggtcgc cccgtcctgc ccgcaaacct tactaccttg 420
155 acctacgaga ccgtgtcttg aacgcgcttg gagactgcag cctccgcgcg cgcttcagcc 480
156 gctgcagcca ccgcccgcgg gatttgtgact gactttgctt tccctgagcc gcttgcaagc 540
157 agtgcagctt cccgttcacg cgcgcgcgat gacaagtga cggctctttt ggcacaattg 600
158 gattctttga cccgggaact taatgtcgtt tctcagcagc tgttggtatc gcgccagcag 660
159 gtttctgccc tgaaggcttc ctcccctccc aatgcggttt aaacataaaa taaaaaacca 720
160 gactctgttt ggatttggat caagcaagtg tcttctgtgc tttatttagg ggttttgccg 780

```

## RAW SEQUENCE LISTING

DATE: 07/17/2000

PATENT APPLICATION: US/09/449,817

TIME: 11:26:30

Input Set : A:\Seqidt-1.txt

Output Set: N:\CRF3\07172000\I449817.raw

```
161 gcgcggttagg cccgggacga gcggtctcgg tcgttgaggg tcctgtgtat tttttccagg 840
162 acgtggtaaa ggtgactctg gatgttcaga tacatgggca taagcccgtc tctgggggtg 900
163 aggtagcacc actgcagagc ttcatgctgc ggggtggtgt tgtagatgat ccagtcgtag 960
164 caggagcgct gggcggtggt cctaaaaatg tctttcagta gcaagctgat tgccaggggc 1020
165 aggcctcttg tgaagtgtt tacaaaagcg ttaagctggg atgggtgcat acgtggggat 1080
166 atgagatgca tcttgactg tatttttagg ttggtatgt tcccagccat atccctcccg 1140
167 ggattcatgt tgtgcagaac caccagcaca gtgtatccgg tgcacttggg aaatttgtca 1200
168 tgtagcttag aaggaaatgc ttggaagaac ttggagacgc ccttgtgacc tccaagattt 1260
169 tccatgcatt cgtccataat gatggcaatg ggcccacggg cgggcgccct ggccaagata 1320
170 tttctgggat cactaacgtc atagtgtgtt tccaggatga gatcgctata ggccattttt 1380
171 acaaagcgcg ggcggagggt gccagactgc ggtataatgg ttccatccgg ccaggggcg 1440
172 tagttaccct cacagatttg catttccacg cctttgagtt cagatggggg gatcatgtct 1500
173 acctcggggg cgatgaagaa aacggtttcc ggggtagggg agatcagctg ggaagaaagc 1560
174 aggttctctg gcagctgcga cttaccgcag ccggtggggc cgtaaatac acctattacc 1620
175 ggggtcaact ggtagttaa agagctgcag ctgcccgtcat ccctgagcag gggggccact 1680
176 tcgttaaaga tgtccctgac tcgcatgttt tccctgacca aatccgccag aaggcgctcg 1740
177 ccgccacagc atagcagttc ttgcaaggaa gcaaagtttt tcaacggttt gagaccgtcc 1800
178 gccgtaggca tgcctttgag cgtttgacca agcagttcca ggcgttcca cagctcggtc 1860
179 acctgctcta cggcatctcg atccagcata tctctcgtt tcgcggttg gggcggttt 1920
180 cgctgtacgg cagtagtcgg tgctcgtcca gacgggccag ggtcatgtct ttccacgggc 1980
181 gcagggtcct cgtcagcgta gtctgggtca cggtaagggt gtgcgctccg ggctgcgcgc 2040
182 tggccagggt gcgcttgagg ctggtctcgc tgggtctgaa gcgctgcgcg tcttcgccct 2100
183 gcgcgtcgcg caggtagcat ttgaccatgg tgcataagtc cagccctcc gcggcggtgg 2160
184 ccttggcgcg cagcttgccc ttggaggagg cgccgcacga ggggcagtgc agacttttga 2220
185 gggcgtagag cttgggcgcg agaaataccg attccgggga gtaggcattc gcgcgcag 2280
186 ccgcgcagc ggtctcgcac tccacgagcc aggtgagctc tggccgttcg gggtcaaaaa 2340
187 ccaggtttcc cccatgcttt ttgatgcgtt tcttacctct ggtttccatg agccggtgtc 2400
188 cagcctcggt gacgaaaagg ctgtccgtgt ccccgataac agacttgaga ggcctgtcct 2460
189 cgagcggtgt tccgcggtcc tctcgtata gaaactcgga ccaacttgag acaaaggctc 2520
190 gcgtccagcg cagcacgaag gaggctaagt gggaggggta gcggtcgttg tccactaggg 2580
191 ggtccactcg ctccagggtg tgaagacaca tgcgcacctc ttcggcatca aggaagggtg 2640
192 ttggtttgta ggtgtaggcc acgtgaccgg gtgttctga aggggggcta taaaaggggg 2700
193 tgggggcgcg ttctctctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg 2760
194 gtgagtactc cctctgaaaa gcgggcatga cttctgcgct aagattgtca gtttccaaaa 2820
195 acgaggagga tttgatattc acctggcccc cggtgatgcc tttgagggtg gccgcattca 2880
196 tctggtcaga aaagacaatc tttttgtgt caagcttggg ggcaaacgac ccgtagaggg 2940
197 cgttggacag caacttggcg atggagcgca gggtttggtt tttgtcgcga tcggcgcgct 3000
198 ccttggccgc gatgtttagc tgcacgtatt cgcgcgcaac gcaccgccat tcgggaaaga 3060
199 cggtggtgcg ctgctcgggc accaggtgca cgcgccaaac gcggttgtgc agggtgacaa 3120
200 ggtcaacgct ggtggctacc tctccgcgta ggcgctcgtt ggtccagcag aggcggccgc 3180
201 ccttgcgcga gcagaatggc ggtagggggg ctactgcgt ctcgtccggg ggtctgtcgt 3240
202 ccacggtaaa gaccccgggc agcaggcgcg cgtcgaagta gtctatctt catccttgca 3300
203 agtctagcgc ctgctgccat gcgcggcgcg caagcgcgcg ctctgatggg ttgagtgggg 3360
204 gaccccatgg catgggggtg gtgagcgcg aggcgtacat gccgcaaatg tcgtaaacgt 3420
205 agaggggctc tctgagtatt ccaagatatg tagggtagca tcttccaccg cggatgctgg 3480
206 cgcgcacgta atcgatatgt tcgtgcgagg gagcgaggag gtcgggaccg aggttgctac 3540
207 gggcgggctg ctctgctcgg aagactatct gcctgaagat ggcatgtgag ttggatgata 3600
208 tggttggacg ctggaagacg ttgaagctgg cgtctgtgag acctaccg cgacgcacga 3660
209 aggaggcgta ggagtcgcgc agcttgttga ccagctcgcg ggtgacctgc acgtctaggg 3720
```

## RAW SEQUENCE LISTING

DATE: 07/17/2000

PATENT APPLICATION: US/09/449,817

TIME: 11:26:30

Input Set : A:\Seqidt-1.txt

Output Set: N:\CRF3\07172000\I449817.raw

```
210 cgcagtagtc caggggtttcc ttgatgatgt catacttata ctgtcccttt tttttccaca 3780
211 gctcgcgggt gaggacaaac tcttcgcgggt ctttccagta ctcttgatc ggaaacccgt 3840
212 cggcctccga acggtaaag cctagcatgt agaactgggt gacggcctgg taggcgcagc 3900
213 atcccttttc tacgggtagc gcgtatgcct gcgcggcctt ccggagcgag gtgtgggtga 3960
214 gcgcaaaggt gtccctgacc atgactttga ggtactggtt tttgaagta gtgtcgtcgc 4020
215 atccgccctg ctcccagagc aaaaagtccg tgcgcttttt ggaacgcgga tttggcaggg 4080
216 cgaaggtgac atcgttgaag agtatctttc ccgcgcgagg cataaagtgt cgtgtgatgc 4140
217 gaaaggggtcc cggcacctcg gaacggttgt taattacctg ggcggcgagc acgatctcgt 4200
218 caaagccgtt gatgttgtgg cccacaatgt aaagttccaa gaagcgcggt atgccttga 4260
219 tggaaagcaa ttttttaagt tcctcgttag tgagctcttc aggggagctg agcccgtgct 4320
220 ctgaaagggc ccagtcgtca agatgagggg tggaaagcgc gaatgagctc cacaggtcac 4380
221 gggccattag catttgacag tggtcgcgaa aggtccctaa ctggcgacct atggccattt 4440
222 tttctggggg gatgcagtag aaggtaagcg ggtcttggtc ccagcgggtc catccaaggt 4500
223 tcgcggctag gtctcgcgcg gcagtcacta gaggtctatc tccgccgaac ttcattgacca 4560
224 gcatgaaggg cacgagctgc ttcccacagg ccccatccca agtataggtc tctacatcgt 4620
225 aggtgacaaa gagacgctcg gtgcgaggat gcgagccgat cgggaagaac tggatctccc 4680
226 gccaccaatt ggaggagtgc ctattgatgt ggtgaaagta gaagtcctg cgacggggcg 4740
227 aacactcgtg ctggcttttg taaaaacgtg cgcagtagtg gcagcggtgc acgggctgta 4800
228 catcctgcac gaggttgacc tgacgaccgc gcacaaggaa gcagagtggt aatttgagcc 4860
229 cctcgcctgg cgggttttgc tgggtgtctt ctacttcggc tgcttgctct tgaccgtctg 4920
230 gctgctcag gggagttacg gtggatcgga ccaccacgcc gcgcgagccc aaagtccaga 4980
231 tgtccgcgcg cggcggtcgg agcttgatga caacatcgcg cagatgggag ctgtccatgg 5040
232 tctggagctc ccgcggcgtc aggtcaggcg ggaagtcctg caggtttacc tcgcatagac 5100
233 gggtcagggc gcgggctaga tccaggtgat acctaatctc caggggctgg ttgggtggcg 5160
234 cgtcgatggc ttgcaagagg ccgcctcccc gcggcgcgac tacggtaccg cgcggcgggc 5220
235 ggtgggcgcg gggggtgtcc ttggatgatg catctaaaag cggtgacgcg ggcgagcccc 5280
236 cggaggtagg gggggtctcg gacccgcccg gagagggggc aggggcacgt cggcgccgcg 5340
237 cgcgggcagg agctgggtct gcgcgcgtag gttgctggcg aacgcgacga cgcggcggtt 5400
238 gatctcctga atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgagcctgaa 5460
239 agagagttcg acagaatcaa tttcgggtgc gttgacggcg gcctggcgca aaatctcctg 5520
240 caogtctcct gagttgtctt gataggcgat ctcgccatg aactgctcga tctcttctc 5580
241 ctggagatct ccgcgtcccg ctgcctccac ggtggcgcg aggtcgttgg aaatgcgggc 5640
242 catgagctgc gagaaggcgt tgaggcctcc ctggttccag acgcggctgt agaccacgcc 5700
243 ccttcgcgca tcgcggggcg gcatgaccac ctgcgcgaga ttgagctcca cgtgcggggc 5760
244 gaagacggcg tagtttcgca ggcgctgaaa gaggtagttg aggggtggtg cgggtgtgtc 5820
245 tgccacgaag aagtaacataa cccagcgtcg caacgtggat tcgttgatat cccccaaggc 5880
246 ctcaagcgcg tccatggcct cgtagaagtc cagcgcgaaag ttgaaaaact gggagttgag 5940
247 cgcgcgacag gttaaactct cctccagaag acggatgagc tcggcgacag tgtcgcgcac 6000
248 ctgcgctca aaggctacag gggcctcttc ttcttcttca atctctctt ccataagggc 6060
249 ctcccctct tcttctctg gcggcggtgg gggagggggg acacggcggc gacgacggcg 6120
250 caccgggagg cggtcgacaa agcgtctcat catctcccc cggcgacggc gcatgggtct 6180
251 ggtgacggcg cggccgttct cgcggggggc cagttggaag acgcggcccg tcatgtcccg 6240
252 gttatgggtt ggcggggggc tgccatgcgg cagggatacg gcgctaacga tgcattctaa 6300
253 caattgttgt gtaggtactc cgcgcgcgag ggacctgagc gagtccgcat cgaccggatc 6360
254 ggaacaccto tcgagaaaag cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt 6420
255 ggcggggcgc agcggggcgc ggtcgggggt gttctggtg gaggtgctgc tgatgatgta 6480
256 attaaagtag gcggtcttga gacggcggat ggtcgacaga agcaccatgt ccttggggtc 6540
257 ggcctgctga atgcgcagg ggtcggccat gccccaggct tcgttttgac atcggcgag 6600
258 gtcttttag tagtcttga tgagccttcc taccggcact tcttctctc cttctctctg 6660
```



VERIFICATION SUMMARY

PATENT APPLICATION: US/09/449,817

DATE: 07/17/2000

TIME: 11:26:31

Input Set : A:\Segidt-1.txt

Output Set: N:\CRF3\07172000\I449817.raw

L:22 M:282 W: Numeric Field Identifier Missing, <213> is required.  
L:42 M:282 W: Numeric Field Identifier Missing, <213> is required.  
L:75 M:282 W: Numeric Field Identifier Missing, <213> is required.  
L:147 M:282 W: Numeric Field Identifier Missing, <213> is required.